

Title (en)
ANALYSIS DEVICE AND ANALYSIS METHOD

Title (de)
ANALYSEVORRICHTUNG UND ANALYSEVERFAHREN

Title (fr)
DISPOSITIF D'ANALYSE ET PROCÉDÉ D'ANALYSE

Publication
EP 4001910 A4 20230802 (EN)

Application
EP 20842677 A 20200408

Priority
• JP 2020015773 W 20200408
• JP 2019133863 A 20190719

Abstract (en)
[origin: EP4001910A1] Provided is an analysis device capable of analyzing an abnormality in the analysis device using an ion selective electrode. According to the present disclosure, an analysis device measures ion concentration in a sample. The analysis device includes an ion selective electrode that obtains a potential based on the ion concentration, a reference electrode that obtains a potential based on a reference liquid, a measurement unit that measures an electromotive force between the ion selective electrode and the reference electrode, an analyzer that analyzes a potential change of the electromotive force in a certain time region, and a storage that stores abnormality analysis data indicating a relation between the potential change and an abnormality of the analysis device. The analyzer acquires a parameter for the potential change of the electromotive force measured by the measurement unit, and analyzes the abnormality of the analysis device based on the parameter and the abnormality analysis data stored in the storage.

IPC 8 full level
G01N 27/416 (2006.01); **G01N 27/403** (2006.01)

CPC (source: EP US)
G01N 27/333 (2013.01 - US); **G01N 27/4163** (2013.01 - EP US); **G01N 27/4035** (2013.01 - EP)

Citation (search report)
• [XP] WO 2020054473 A1 20200319 - HITACHI HIGH TECH CORP [JP] & EP 3851842 A1 20210721 - HITACHI HIGH TECH CORP [JP]
• [XYI] US 2012261260 A1 20121018 - LI QING [JP], et al
• [Y] HOMBORG A M ET AL: "An integrated approach in the time, frequency and time-frequency domain for the identification of corrosion using electrochemical noise", ELECTROCHIMICA ACTA, ELSEVIER, AMSTERDAM, NL, vol. 222, 6 November 2016 (2016-11-06), pages 627 - 640, XP029870809, ISSN: 0013-4686, DOI: 10.1016/J.ELECTACTA.2016.11.018
• [Y] DAROWICKI K. ET AL: "Joint time-frequency analysis of electrochemical noise", JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol. 504, no. 2, 18 May 2001 (2001-05-18), AMSTERDAM, NL, pages 201 - 207, XP093057359, ISSN: 1572-6657, DOI: 10.1016/S0022-0728(01)00425-9
• See also references of WO 2021014695A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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EP 20842677 A 20200408; CN 202080049766 A 20200408; JP 2019133863 A 20190719; JP 2020015773 W 20200408; US 202017627910 A 20200408